

# PowerCat 6A Unshielded LS0H Cable **molex**

The PowerCat 6A unshielded LS0H Cable is specifically designed to support high-speed data network applications such as 10GBASE-T. The innovative design includes a metal tape wrap around each pair, which provides excellent Alien Crosstalk defence. The low diameter of the cable allows for a higher cable density in containment, reducing cost. The product is 3rd party verified to ANSI/TIA-568.2-D and ISO 11801 Category 6A standards.

## Features and Advantages

**Supports up to 500 MHz frequency**  
Supports high-speed data applications

**IEEE 802.3bt-2018**  
Power over  
Ethernet compliant

**ANSI/TIA-568.2-D  
and ISO 11801 Cat 6A  
standard verified**  
Ensures quality and  
reliability of the cables

**No grounding or  
bonding required**  
Easy to install

**Low overall cable diameter - 7mm (nom.)**  
Offers high cable density and low bend  
radius, reducing the installation cost



## Markets and Applications

### IT Infrastructure Solutions

- IT and Telecommunication
- Government and Education
- Financial
- Insurance
- Legal
- Healthcare

- Suitable for any high-speed data application up to 500MHz 10/100/10GBASE-T
- Backward compatible to legacy protocols and applications

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## Specifications

### REFERENCE INFORMATION

Commercial Standards:  
 ANSI/TIA-568.2-D Cat 6A  
 ISO 11801/IEC 11801 Ed 2.2  
 IEC 61156-5  
 IEEE 802.3bt-2018 - Amendment 2  
 3rd Party verified by Intertek ETL

Environmental Standards:  
 RoHS compliant

Fire Propagation Tests:  
 IEC 60332-1, IEC 60754-1&2,  
 IEC 61034-2  
 EN 50575:2014+A1:2016: EuroClass  
 Dca-s2, d1, a1  
 DoP No: MLXCES-2018-C-034

### ELECTRICAL

DC Resistance: 77 Ohm/km max. (2% max. resistance unbalance)  
 DC Loop Resistance: 154 Ohm/km max. (2% max. resistance unbalance)  
 Voltage Rating: 72Vdc max.  
 Delay Skew: 25nS/100m max.

### MECHANICAL

Tensile Strength: 150N max.

### PHYSICAL

Pair Count: 4  
 Conductor: Solid annealed copper  
 AWG: 23 (0.56mm)  
 Insulation: LS0H  
 Cable Diameter: 7.0mm nom.  
 Bending Radius (min.): 8 x O.D.  
 Weight (approx.): 25.5kg nominal/500m reel  
 Sheath Colour: Blue RAL 5015  
 Metal Wrap: Aluminium foil  
 Operating Temperature: -20 to +60°C  
 Installation Temperature: 0 to +50°C  
 NVP: 75-77% nom.

### ELECTRICAL

Frequency MHz	Insertion Loss	NEXT	PS NEXT	ACRF	PS ACRF	RL	Delay	TCL	EL-TCL	PS ANEXT	PSACRF
	dB/100m	dB	dB	dB/100m	dB/100m	dB	nS/100	dB	dB	dB	dB
	max.	min.	min.	min.	min.	min.	max.	min.	min.	min.	min.
1	2.0	74.3	72.3	67.8	64.8	20.0	570.0	40.0	35.0	67.0	67.0
10	5.9	59.3	57.3	47.8	44.8	25.0	545.0	40.0	15.0	67.0	58.2
20	8.3	54.8	52.8	41.8	38.8	25.0	542.0	37.0	9.0	67.0	52.2
25	9.3	53.3	51.3	39.8	36.8	24.3	541.0	36.0	7.0	67.0	50.2
30	10.2	52.1	50.1	38.3	35.3	23.8	541.0	35.2	5.5	67.0	48.7
62.5	14.9	47.4	45.4	31.9	28.9	21.5	539.0	32.0	NS	65.6	42.3
100	19.0	44.3	42.3	27.8	24.8	20.1	538.0	30.0	NS	62.5	38.2
200	27.5	39.8	37.8	21.8	18.8	18.0	537.0	27.0	NS	58.0	32.2
250	31.0	38.3	36.3	19.8	16.8	17.3	536.0	26.0	NS	56.5	30.2
300	34.2	37.1	35.1	18.3	15.3	16.8	536.0	25.2	NS	55.3	28.7
400	40.0	35.3	33.3	15.8	12.8	15.9	536.0	24.0	NS	53.5	26.2
500	45.3	33.8	31.8	13.8	10.8	15.2	536.0	23.0	NS	52.0	24.2

## Ordering Information

Series No.	SAP No	Description
CAA-00422-BL*	1810000030	PowerCat 6A Unshielded LS0H Cable Blue 500m reel
* Available in APAC only		
CAA-00424-BL†	1810000014	PowerCat 6A Unshielded Dca-s2, d1, a1 Cable Blue 500m reel
† Available in EMEA only		

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